Prepared by Richard C. Calderwood, Reg. No. 35,468

## UNITED STATES PATENT APPLICATION

Title:

## **NO-FLYAWAY PICNIC PLATE**

Inventor:

Edward O. Clapper

"Express mail" label no. EU714550293US

Docket: EC005 Page 1

## **NO-FLYAWAY PICNIC PLATE**

1	NO-FLYAWAY PICNIC PLATE	
2	Background of the Invention	
3	Technical Field of the Invention	
4	This invention relates generally to food plates, and more specifically to lightweight or	
5	disposable plates intended for outdoor use.	
6	Background Art	
7	FIG. 1 illustrates a plate 10 resting on a table 12. The plate is a conventional paper or	
8	plastic plate intended for picnic or other outdoor use.	
9	FIG. 2 and its detail view 2A illustrate the plate 10 and table 12 in cross-section, pointing	
10	out an unfortunate but all too familiar event. When the wind gets under the upper, outer lip 14 of	
11	the paper plate, the wind lifts the paper plate from that side and may tip the plate over or even	
12	throw it some distance through the air. If the wind is strong enough, this occurs even if there is a	
13	substantial amount of food on the plate, resulting in a big mess and wasted food. The shape of	
14	the lip 14 is typical of the extremely thin, pleated paper plates which are typically used two at a	
15	time, to increase stiffness, or used in reusable paper plate holders.	
16	FIG. 3 illustrates a plate 20 resting on a table 12. The shape of this plate is typical of the	
17	stiffer, thicker paper plates such as those sold under the Chinette brand, and of some plastic	
18	picnic plates and some styrofoam picnic plates.	
19	FIG. 4 and its detail view 4A illustrate that the lip 22 of the plate is slightly turned over,	
20	meaning that it extends somewhat downward toward the table 12. However, wind is still able to	
21	get under the lip and flip or throw the plate.	
22	What is needed, then, is an improved plate which has a reduced tendency to flip over or	
23	fly away in the wind.	
24	Brief Description of the Drawings	
25	The invention will be understood more fully from the detailed description given below	

and from the accompanying drawings of embodiments of the invention which, however, should

not be taken to limit the invention to the specific embodiments described, but are for explanation

Page 2 Docket: EC005

and understanding only.

26

27

28

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

26

27

28

29

FIGS. 1 and 2, and detail view 2A, show a conventional picnic plate.

FIGS. 3 and 4, and detail view 4A, show another conventional picnic plate.

FIGS. 5 and 6, and detail view 6A, show one embodiment of a picnic plate according to this invention.

FIG. 7 shows another embodiment of a picnic plate according to this invention, having cutouts making it easier for the user to lift the plate off from a flat surface.

FIG. 8 shows another embodiment of a picnic plate according to this invention, having formed grips making it easier for the user to lift the plate off from a flat surface.

## **Detailed Description**

FIGS. 5 and 6, and detail view 6A illustrate one embodiment of a plate 30 according to this invention, resting on a table 12. The outer lip 32 of the plate extends downward until it is substantially in contact with the surface of the table. In some embodiments, the lip may actually extend farther downward than the central, food-holding portion 34 of the plate, such that the lip is held against the table under tension when food is on the plate.

When the wind blows, it has a significantly reduced ability to get under the lip of the plate and flip or throw the plate, as compared to the prior art plates. In some embodiments, the raised rim 36 of the plate, which gives the plate stiffness, has a substantially rounded shape, offering little resistance to the wind and guiding the wind easily past the lip 32 and over the plate. In some embodiments, the shape of the end of the lip may be cut so as to be flush with the table. In other embodiments, it may be cut so as to be perpendicular with the paper. In other embodiments, it may be cut in some other direction, such as vertically.

FIG. 7 illustrates another embodiment of a plate 40 according to this invention. Because the lip 46 of the plate extends substantially all the way down to the table (not shown), it can be difficult to pick up the plate, especially in embodiments in which the rim 44 has a gently rounded contour. In order to make the plate easier to pick up, its outer perimeter is provided with one or more notches or cutouts 48 which extend inward from the outer/lower edge of the lip. The notches should not extend too far through the rim 44 toward the flat food surface 42, or the rigidity of the plate will be compromised in that radial component, and the plate may hinge or otherwise collapse if inadequately supported and overloaded with food. Ideally, the notches

Docket: EC005 Page 3

should be just large enough to permit a finger to gain purchase on their edges, so the user can lift the edge of the plate.

FIG. 8 illustrates another embodiment of a plate 50 according to this invention. The plate includes a central, generally planar surface 52 for holding food, a raised rim 54 giving stiffness to the plate, and a lip 56 which extends downward from the rim to a point substantially co-planar with, or even beyond, the central planar surface. One or more pinch grips 60, 62 are formed in the rim, by which the user can pick up the plate from off a flat surface such as a picnic table, without having to try to get his or her fingers under the lip 56 which is in very close proximity to the flat surface and which may even be held against the flat surface under tension by the weight of food on the plate flexing the rim until the central planar portion of the plate rests on the flat surface. In some embodiments, the pinch grips include a first side 60 extending outward from the central portion of the plate and a second side 58 extending inward from the outer perimeter of the plate. In other embodiments, one or the other side may be present without the other. In some embodiments, such as that illustrated, the outer grip 52 may stop short of the lip 56 such that the bottom of the grip is not coplanar with the central portion of the plate. In other embodiments, the outer grip may extend farther outward and downward, until its bottom surface forms the lip at that radial position.

The various embodiments of the plate of this invention may be manufactured from paper, plastic, foamed plastic such as styrofoam, or any other suitable material. By incorporating this invention, even very thin and light plates can be made to resist being lifted and thrown by the wind. This may enable the use of thinner material versus what is used in the prior art, reducing manufacturing costs.

Docket: EC005 Page 4